Criteria for Shoulder Surgery

A request may be appropriate for ↓	If the patient has ↓	AND the diagnosis is supported by ↓	↓	↓	AND this has been done (if recommended) ↓
SURGICAL PROCEDURE	**DIAGNOSIS**	**CLINICAL FINDINGS**			**CONSERVATIVE CARE**
		SUBJECTIVE	**OBJECTIVE**	**IMAGING**	
Rotator cuff repair (CPT 23410, 23412, 23420)	**Full Thickness Rotator Cuff Tear** **AND** Cervical pathology and frozen shoulder syndrome have been ruled out	Shoulder pain and inability to elevate the arm; Tenderness over the greater tuberosity is common in acute cases	Patient may have weakness with abduction testing; May also demonstrate atrophy of shoulder musculature; Usually has full passive range of motion.	Conventional x-rays, AP, and true lateral or axillary view **AND** Gadolinium MRI, Ultrasound, or Arthrogram shows positive evidence of deficit in rotator cuff	Not required
Rotator cuff repair CPT 23410, 23412, or 23420) **OR** **Anterior acromioplasty** [1] (CPT 23130, 23415, 29826)	**Partial Thickness Rotator Cuff Repair** **OR** **Acromial Impingement Syndrome** (80% of these patients will get better without surgery) [1]	Pain with active arc motion 90-130 ° **AND** Pain at night; Tenderness over the greater tuberosity is common in acute cases.	Weak or absent abduction. May also demonstrate atrophy **AND** Tenderness over rotator cuff or anterior acromial area **AND** Positive impingement sign and temporary relief of pain with anesthetic injection (diagnostic injection test)	Conventional x-rays, AP, and true lateral or axillary view **AND** Gadolinium MRI, Ultrasound, or Arthrogram shows positive evidence of deficit in rotator cuff	Recommend 3-6 months: Three months is adequate if treatment has been continuous, six months if treatment has been intermittent. Treatment must be directed toward gaining full ROM, which requires both stretching and strengthening to balance the musculature.
Treatment of acromioclavicular dislocation, **acute or chronic** (CPT 23550)	**Shoulder AC Joint Separation**	Pain with marked functional difficulty	Marked deformity	Conventional x-rays Show Grade III+ separation	Recommend at least 3 months. Most patients with grade III AC dislocations are best treated non-operatively.
Partial claviculectomy (includes Mumford procedure) (CPT 23120, 29824)	**Post traumatic Arthritis of AC Joint**	Pain at AC joint; aggravation of pain with shoulder motion or carrying weight **OR** Previous Grade I or II AC separation	Tenderness over the AC joint; Most symptomatic patients with partial AC join separation have a positive bone scan **AND/OR** Pain relief obtained with an injection of anesthetic for diagnostic therapeutic trial	Conventional films show either: (a) Post traumatic changes of AC joint, OR (b) Severe DJD of AC joint, OR (c) Complete or incomplete separation of AC joint. **AND** Bone scan is positive for AC joint separation	At least 6 weeks of care directed toward symptom relief prior to surgery. Surgery is not indicated before 6 weeks.

[1] Neer, C. S. Anterior acromioplasty for the chronic impingement syndrome in the shoulder: a preliminary report. Journal of Bone & Joint Surgery, American Volume. 54(1):41-50, 1972 (Jan.)

Reference: Provider Bulletin 02-01; Date Introduced: March 2002

Criteria for Shoulder Surgery -- Continued

A request may be appropriate for ↓	If the patient has ↓	AND the diagnosis is supported by ↓ ↓ ↓			AND this has been done (if recommended) ↓
SURGICAL PROCEDURE	**DIAGNOSIS**	**CLINICAL FINDINGS**			**CONSERVATIVE CARE**
		SUBJECTIVE	**OBJECTIVE**	**IMAGING**	
Capsulorrhaphy or Bankart procedure (CPT 23450, 23455, 29806)	**Recurrent Glenohumeral Dislocations**	History of multiple dislocations that inhibit activities of daily living	At least one of the following: Positive apprehension findings; OR Injury to the humeral head; OR Documented dislocation under anesthesia	Conventional x-rays, AP and true lateral or axillary view	None required
Tenodesis of Long Head of Biceps (CPT 23430) Consideration of tenodesis should include the following: Patient should be a young adult; Not recommended as an independent stand alone procedure There must be evidence of an incomplete tear	**Incomplete Tear or raying of the Proximal Biceps Tendon** The diagnosis of fraying is usually identified at the time of acromioplasty or rotator cuff repair so may require retrospective review	Complaint of more than "normal" amount of pain that does not resolve with attempt to use arm. Pain and function fails to follow normal course of recovery.	Partial thickness tears do not have the classical appearance of ruptured muscle.	Same as that required to rule out full thickness rotator cuff tear: Conventional x-rays, AP, and true lateral or axillary view **AND** Gadolinium MRI, Ultrasound, or Arthrogram shows positive evidence of deficit in rotator cuff	None required
Tenodesis of Long Head of Biceps (CPT 23430)	**Complete Tear of the Proximal Biceps Tendon**	Pain, weakness, and deformity	Classical appearance of ruptured muscle.	Not required	Surgery almost never considered in full thickness ruptures.
Reinsertion of Ruptured Biceps Tendon (CPT 24342)	**Distal Rupture of the Biceps Tendon**	All should be repaired within 2-3 weeks of injury or diagnosis. A diagnosis is made when the physician cannot palpate the insertion of the tendon at the patient's antecubital fossa. Surgery is not indicated if 3 or more months have elapsed.			
Diagnostic Arthroscopy (CPT 29805)	**Shoulder Arthroscopy for Diagnostic Purposes**	Most orthopedic surgeons can generally determine the diagnosis through examination and imaging studies alone. Diagnostic arthroscopy should be limited to cases where imaging is inconclusive and acute pain or functional limitation continues despite conservative care. Shoulder arthroscopy should be performed in the outpatient setting. Requests for authorization of this procedure in the inpatient setting will be reviewed by a peer physician. If a rotator cuff tear is shown to be present following a diagnostic arthroscopy, follow the guidelines for either a full or partial thickness rotator cuff tear.			

Guidelines For Lumbar Fusion (Arthrodesis)

I. The purpose of these guidelines is:

A. To serve as an instructional aid for physicians when treating injured workers who present with low back pain and associated symptoms that have developed in the context of routine work activity, and who have no evidence of spinal fracture.

B. To provide utilization review nurses with the information necessary to make recommendations about the medical necessity and clinical appropriateness of spinal fusions.

Exception: These guidelines do not apply to requests for fusion to treat patients with a spinal fracture or dislocation, spinal infection, or spinal deformity, (e.g. one related to degenerative scoliosis).

II. Conservative care (consisting of all the following) should be tried first.

A. The patient should have at least three months of conservative therapy for low back pain, which predominantly emphasizes physical reconditioning.

B. The surgeon requesting the lumbar fusion should have personally evaluated the patient on at least two occasions prior to requesting the fusion.

Exception: If the patient has a progressive neurological deficit, both A and B above can be waived.

III. If conservative care has failed to relieve symptoms and the patient has had no prior surgery, lumbar fusions should be considered only if the patient has one or more of the following:

A. Mechanical (non-radicular) low back pain with instability;

Instability of the lumbar segment is defined as at least 4mm of anterior/posterior translation at L3-4 and L4-5, or 5mm of translation at L5-S1 or 11 degrees greater end plate angular change at a single level, compared to an adjacent level. Adequate flexion/extension views should be taken utilizing techniques that minimize the potential contribution of hip motion to perceived lumbar flexion or extension.

Note: Only single level fusions will be approved for patients with no prior spinal surgery.

Reference: Provider Bulletin 01-05; Date Introduced: June 2001

B. Spondylolisthesis exists with one or more of the following:

1. Objective signs/symptoms of neurogenic claudication *OR*
2. Objective signs/symptoms of unilateral or bilateral radiculopathy, which are corroborated by neurologic examination and by MRI or CT (with or without myelography) *OR*
3. Instability of the lumbar segment as defined above in section III-A.

IV. If conservative care has failed to relieve symptoms and the patient has had a prior laminectomy, diskectomy, or other decompressive procedure at the same level, lumbar fusion should be considered only if the patient has one or more of the following:

A. Mechanical (non-radicular) low back pain with instability (as defined above in Section III-A) at the same or adjacent levels *OR*
B. Mechanical (non-radicular) low back pain with pseudospondylolisthesis, rotational deformity or other condition leading to a progressive (measurable) deformity *OR*
C. Objective signs/symptoms compatible with neurogenic claudication or lumbar radiculopathy that is supported by MRI or CT (with or without myelography) and by a detailed clinical neurological examination *OR*
D. Evidence from a post-laminectomy structural study of either:
    1. 100% loss of facet surface area unilaterally, *OR*
    2. 50% combined loss of facet surface area bilaterally

V. If conservative care has failed to relive symptoms and the patient has had a prior fusion at the same level, lumbar fusion should be considered only if the patient has one or more of the following:

A. Psuedarthrosis with or without hardware failure, confirmed by objective evidence of pseudarthrosis (e.g. abnormal thin slice CT scan)
B. Neurogenic claudication supported by either MRI, CT, or myelography
C. Lumbar radiculopathy supported by either MRI, CT, or myelography, or supported by a detailed clinical neurological or neurosurgical examination.

VI. If conservative care has failed to relieve symptoms and the patient has had a prior fusion at a level adjacent to the new one being considered, lumbar fusion should be considered only if the patient meets the same criteria as described for patients with no prior history of spine surgery (see section III above).

VII. Contraindications for lumbar fusions, even when patients meet the criteria described in sections III, IV, V, and VI above.

A. Absolute contraindications
    1. Lumbar fusion is not indicated with an initial laminectomy/diskectomy related to unilateral compression of a lumbar nerve root.

B. Relative contraindications
    1. Severe physical de-conditioning
    2. Current smoking

3. Multiple level degenerative disease of the lumbar spine
4. Greater than 12 months of disability (time-loss compensation benefits) prior to consideration of fusion
5. No evidence of functional recovery (return to work) for at least six months following the most recent spine surgery
6. Psychosocial factors that are correlated with poor outcome, such as:
    a. History of drug or alcohol abuse
    b. High degrees of somatization on clinical or psychological evaluation
    c. Presence of a personality disorder or major psychiatric illness
    d. Current evidence of factitious disorder

VII. When the physician wants to proceed with a lumbar fusion request:

A. The physician should be aware of the following research based findings*:
    1. The chance of an injured worker no longer being disable 2 years after lumbar fusion is only 32%.
    2. More than 50% of workers who received lumbar fusion through the Washington workers' compensation program felt that both pain and functional recovery were no better or worse after lumbar fusion.
    3. The overall rate of re-operation within 2 years for all fusions is approximately 23%.
    4. Smoking at the time of fusion greatly increases the risk of pseudarthrosis.
    5. Pain relief, even when present, is not likely to be complete.
    6. The use of spine stabilization hardware (metal devices) in Washington workers nearly doubled the chances of having another surgery.

B. The operating surgeon should follow the lumbar fusion patient at least every two months for the first six postoperative months. At the six month examination, if the patient is still experiencing significant pain, a face to face evaluation should be conducted, which includes all of the following elements:
    1. Neurologic examination
    2. This slice CT to rule out pseudarthrosis
    3. Repeat flexion-extension films to rule out instability (as defined in III-A)

    If new objective neurologic signs are absent, and if there is no objective evidence of fusion failure, the patient may have reached maximum medical improvement and an impairment rating (permanent partial disability (PPD) assessment) may be appropriate.

C. Prior to lumbar fusion, clinical psychological or psychiatric assessment should be performed on all patients who meet the lumbar fusion criteria and who have been receiving time-loss compensation benefits. This assessment is intended to help the requesting surgeon identify specific psychological risk factors for chronic disability that may be barriers to recovery following lumbar fusion.
D. All intraoperative determinations of instability that lead to fusion must be clearly documented at the time, and (if requested by L&I) subsequently discussed with a peer surgeon.

E. Although adding to the clinical database, provocative discography, diagnostic facet joint injections, and pain relief during the use of a rigid spinal brace are not definitive indications for fusion.
F. Anterior Lumbar Interbody Fusion (ALIF), if indicated, should be done only in conjunction with a posterior stabilization procedure.

Note: Prior to surgery, the physician should discuss with the patient, the information provided on the attached form (see next page). After discussing these details, both the physician and patient should sign at the bottom of the form. The form should be kept in the patient's medical records at the requesting surgeon's office.

What You Should Know About Lumbar Fusion Surgery

Labor & Industries (the department) has created this information form so you will know how lumbar fusion surgery may affect your health and recovery. The department requires your doctor to discuss this information with you before the surgery in order to make the best decision possible. After you have read and discussed this information, both you and your doctor should sign your names at the end of this form. **This is NOT a surgical consent form.**

A study* conducted by Labor & Industries at the University of Washington showed that in Washington workers:

- About 2/3 of the workers who receive a lumbar fusion are still disabled two years after the surgery.
- More than half of the workers who received lumbar fusion felt that both their pain and ability to function were no better or worse after the surgery.
- Almost one quarter of the workers who had fusion surgery were operated on again within two years.
- Smoking at the time of fusion greatly increases the risk of failed fusion.
- The use of spine stabilization hardware (metal devices) in Washington workers nearly doubled the chances of having another surgery.
- Pain relief, even when present, is not likely to be complete.

In addition:

- Smoking at the time of fusion greatly increases the risk of fusion failure.
- Pain relief after fusion, even when it occurs, is not likely to be complete.

You should also know the department's expectations:
If the department approves your surgery, I will continue to see you at least every two months for six months after the surgery. If you fusion is successful (as defined in section VIII-B of the guidelines), I will consider you to be stable and will ask for an impairment rating to complete your care. If you continue to have pain after your surgery and I cannot find a medical reason for it, the department may not continue to pay for your medical care.

By signing this form, we (the *patient* and *physician*), attest that we have discussed the information presented here, we understand this information, and we wish to proceed with the fusion procedure. **We also understand that this information does NOT take the place of, and is separate and distinct from, the surgical consent form that we will review and sign prior to surgery.**

_____	_____
Patient Name	Physician Name
Date: ___/___/___	Date: ___/___/___

***** Gary Franklin, MD, et. al., "Outcomes of Lumbar Fusion in Washington State Workers' Compensation" SPINE 1994, Vol 9, No. 17, pp. 1897 – 1903.

Surgery for Thoracic Outlet Syndrome (TOS)

TYPE OF TOS	SUBJECTIVE		OBJECTIVE		IMAGING
VASCULAR TOS ARTERIAL	At least **three** of the following must be present in the affected upper extremity: A. Pain B. Swelling or heaviness C. Decreased temperature or change in color D. Paresthesias in the ulnar nerve distribution	**AND**	At lease **one** of the following: A. Pallor or coolness B. Gangrene of the digits in advanced cases	**AND**	C. Abnormal arteriogram
VASCULAR TOS VENOUS	At lease **three** of the following must be present in the affected upper extremity: A. Pain B. Swelling or heaviness C. Decreased temperature or change in color D. Paresthesias in the ulnar nerve distribution	**AND**	At least **two** of the following: A. Swelling of the arm, B. Venous engorgement C. Cyanosis	**AND**	D. Abnormal venogram
NEUROGENIC TOS	In the affected upper extremity: A. Pain ***and*** B. Numbness or paresthesia in the ulnar nerve distribution	**AND**	In the affected upper extremity, **all of the** following electrodiagnostic abnormalities must be found: A. Reduced amplitude median motor response ***and*** B. Reduced amplitude ulnar sensory response ***and*** C. Denervation in muscles innervated by lower trunk of the brachial plexus		

*1 The clinical findings in TOS may be similar to those in carpal tunnel syndrome, ulnar neuropathy or cervical radiculopathy. A physician should consider these alternative diagnoses before requesting TOS surgery.

2. Most patients with TOS have cervical ribs.

3. The Department of Labor and Industries has recently concluded a retrospective study of outcomes of thoracic outlet surgery on patients with Labor and Industries claims. The results indicate that long-term outcomes after TOS surgery are worse than outcomes with medical management of TOS.

SEE NEXT PAGE FOR DETAILS OF CRITERIA

Reference: Provider Bulletin 95-04; Date Introduced: April 1995

Criteria For The Electrodiagnostic Diagnosis Of Unilateral Neurogenic Thoracic Outlet Syndrome (TOS)**

All 3 of the following criteria must be found in the affected limb:

1. Amplitude of median motor response is reduced
   And
2. Amplitude of ulnar sensory response is reduced
   And
3. Needle exam shows denervation in muscles innervated by lower trunk of brachial plexus.

Details Regarding the Above Noted Criteria:

Criterion #1

a) Using standard surface electrodes with active pick up over the abductor pollicis brevis, the amplitude of the median motor response on the affected side should be less than 50% of that obtained on the unaffected side.

Criterion #2

a) Using standard ring electrodes on the fifth digit, the ulnar sensory amplitude on the affected side should be less than 60% of the amplitude on the unaffected side.

Criterion #3

a) Muscles innervated by the lower trunk of the brachial plexus include the abductor pollicis brevis, pronator quadratus, flexor pollicis longus, first dorsal interosseous, abductor digiti minimi, flexor carpi ulnaris, extensor pollicis brevis, and extensor indicis.

b) EMG abnormalities in TOS are most commonly seen in median and ulnar innervated intrinsic muscles of the hand -- especially the abductor pollicis brevis.

c) Positive waves and fibrillations may be found, but chronic denervation changes are more common -- that is, increased motor unit amplitude, increased motor unit duration, and decreased recruitment with rapid firing of motor units are activated.

Notes

The electromyographer should rule out neuropathic conditions that might mimic TOS, specifically cervical radiculopathy, carpal tunnel syndrome, ulnar neuropathy and polyneuropathy.

**Abstracted from Wilbourn A.J. American Association of Electromyography and Electrodiagnosis. Case Report #7: True Neurogenic Thoracic Outlet Syndrome. 1992.